

Multi-Channel Induction Accelerator

ABSTRACT OF THE DISCLOSURE

A multi-channel induction accelerator (MIAC) comprised of the injector block, the drive source, the output device, and the multi-channel induction acceleration block. The latter is made in the form of an aggregate of one-channel linear induction acceleration blocks (including those which are oriented parallel one to other), each of which is made in the form of a sequence of the linearly connected acceleration sections, each of which, in turn, is made in the form of one or a few magnetic inductors enveloped by a conductive screen. Therein, at least one of the conductive screens is made in such a manner that it envelops at least two acceleration sections, which belong to different one-channel linear induction acceleration blocks. The invention allows to increase electric voltage in acceleration spaces of the acceleration sections without increasing the current strength in the inductors winding, and to increase efficiency of the accelerator.